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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/846,037	04/29/2001	Bruce Willard Hultgren	4314.61US01	4307

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EXAMINER
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SALAD, ABDULLAHI ELMI

ART UNIT	PAPER NUMBER
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2157

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/846,037

Applicant(s)

HULTGREN ET AL.

Examiner

Salad E Abdullahi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This application has been reviewed. Original claims 1-45 are pending. The rejection cited stated below.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lo et al. U.S. Patent No. 5,911,044[hereinafter Lo] in view of Guenter et al. U.S. Patent No. 5,911,044.

As per claim 1, Lo discloses a method for providing electronic delivery of electronic model images, the method comprising:

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generating one or more electronic model images, a portion of the electronic model images being generated from scanned electronic data of a physical object (see col. 8, lines 3-20 and col. 16, lines 54-64);

storing the electronic model images within computer readable memory of a server-based computing system (see col. 8, lines 3-20 and col. 16, lines 54-64);

delivering the electronic model images to a remote client computer over a distributed communications network (see col. 18, lines 40-50);

manipulating the electronic model images upon the remote client computer; and performing analysis and a course of action using the manipulated electronic model images (see col. 15, lines 41-55).

Lo is silent regarding:

wherein the electronic model images comprise in part a polygonal mesh representation of the physical object.

Bajaj, discloses a method for generating electronic model images, wherein the electronic model images comprise in part a polygonal mesh representation of the physical object (see col. 16, lines 11-40). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the teaching of Bajaj such the electronic model images comprise in part a polygonal mesh representation of the physical object because polygonal meshes are excellent at representing complex textured details of physical objects.

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As per claim 2, Lo discloses the method according to claim 1, wherein the method further comprises: generating a new electronic model image using the manipulated electronic model image (see col. 15, lines 41-55).

As per claim 3, Lo discloses the method according to claim 2, wherein the method further comprises: storing the electronic model images within computer readable memory of the remote client computer (see col. 16, lines 54-64).

As per claim 4, Bajaj discloses the method according to claim 1, wherein the generating one or more electronic model images comprises: combining the polygonal mesh representation of the physical object with one or more electronic model image of a different type that is related to the physical object (see col. 15, line 55 to col. 16, line 10).

As per claim 5, Bajaj discloses the method according to claim 4, wherein the one or more electronic model image of a different type comprise one or more of the following types of digital images: scanned x-ray images, scanned photographic images, and computer generated images (see col. 6, lines 17-50).

As per claim 6., Lo discloses the method according to claim 1, wherein the distributed computer network comprises the Internet (see fig. 3, element 20 and col. 6, lines 19-28).

As per claim 7, Lo discloses the method according to claim 1, wherein manipulating the electronic model images comprises:

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displaying the electronic model images on a visual display device (see col. 15, lines 41-55);

altering the scale and orientation of the electronic model images in response to user generated commands(see col. 15, lines 41-55); and

determining numeric values associated with physical characteristics of the physical object using the electronic model images(see col. 15, lines 41-55).

As per claim 8, Lo discloses the method according to claim 7, wherein manipulating the electronic model images further comprises:

moving one or more portions of the electronic model image relative to other portions of the electronic model image on the visual display device to determine the interaction of the corresponding portions of the physical object(see col. 15, lines 41-55).

As per claim 9, Lo discloses a method for providing electronic delivery of electronic model images, the method comprising:

generating one or more electronic model images, a portion of the electronic model images being generated from scanned electronic data of a physical object(see col. 8, lines 3-20 and col. 16, lines 54-64);

storing the electronic model images within computer readable memory of a server-based computing system(see col. 8, lines 3-20 and col. 16, lines 54-64);

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delivering the electronic model images to a remote client computer over a distributed communications network(see col. 8, lines 3-20 and col. 16, lines 54-64);

manipulating the electronic model images upon the remote client computer(see col. 15, lines 41-55);

performing analysis and a course of action using the manipulated electronic model images(see col. 15, lines 41-55);

generating a new electronic model image using the manipulated electronic model image(see col. 15, lines 41-55); and

storing the electronic model images within computer readable memory of the remote client computer(see col. 15, lines 41-55).

wherein the electronic model images comprise in part a polygonal mesh representation of the physical object; and

manipulating the electronic model images comprises:

displaying the electronic model images on a visual display device;

altering the scale and orientation of the electronic model images in response to user generated commands;

determining numeric values associated with physical characteristics of the physical object using the electronic model images; and

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moving one or more portions of the electronic model image relative to other portions of the electronic model image on the visual display device to determine the interaction of the corresponding portions of the physical object(see col. 15, lines 41-55).

Lo is silent regarding:

wherein the electronic model images comprise in part a polygonal mesh representation of the physical object.

Bajaj, discloses a method for generating electronic model images, wherein the electronic model images comprise in part a polygonal mesh representation of the physical object (see col. 16, lines 11-40). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the teaching of Bajaj such the electronic model images comprise in part a polygonal mesh representation of the physical object because polygonal meshes are excellent at representing complex textured details of physical objects.

As per claim 10, Lo discloses the method according to claim 9, wherein the generating one or more electronic model images comprises:

combining the polygonal mesh representation of the physical object with one or more electronic model image of a different type that is related to the physical object(see col. 15, line 55 to col. 16, line 10);



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the one or more electronic model image of a different type comprise one or more of the following types of digital images: scanned x-ray images, scanned photographic images, and computer generated images(see col. 6, lines 17-50); and

the distributed computer network comprises the Internet (see fig. 3, element 20 and col. 6, lines 19-28).

As per claim 11, Lo discloses a method for providing electronic model image data files to a remote client computer using a server-based computing system over a distributed communications network, the method comprising:

receiving an electronic model image data files by the server-based computing system (see col. 8, lines 3-20);

storing the electronic model image data files within non-volatile computer readable memory within the server-based computing system(see col. 8, lines 3-20);

receiving a search query from the remote client computer to identify one or more electronic model image data files(see col. 21, lines 20-57);

receiving a file transfer request from the remote client computer requesting one or more electronic model image data files(see col. 21, lines 20-57); and

transmitting one or more electronic model image data files to the remote client computer(see col. 21, lines 20-57);

wherein the electronic model image data files comprise:

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a file header info data block containing data used to identify a physical object represented by the electronic model image data file (see figs 7A-7K and col. Col. 13, lines 21-34).

Lo is silent regarding:

wherein a portion of the electronic model image containing a polygonal mesh representation of the physical object generated from scanned electronic data of a physical object.

Bajaj, discloses a method for generating electronic model images, wherein the electronic model images comprise in part a polygonal mesh representation of the physical object (see col. 16, lines 11-40). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate the teaching of Bajaj such as a portion of the electronic model image containing a polygonal mesh representation of the physical object generated from scanned electronic data of a physical object into the Lo's system because polygonal meshes are excellent at representing complex textured details of physical objects.

AS per claim 12, Bajaj discloses the method according to claim 11, wherein the electronic model image comprises: the polygonal mesh representation of the physical object(see col. 15, line 55 to col. 16, line 10); and

one or more electronic model image of a different type that is related to the physical object (see col. 15, line 55 to col. 16, line 10).

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As per claim 13, Lo discloses the method according to claim 12, wherein the one or more electronic model image of a different type comprise one or more of the following types of digital images: scanned x-ray images, scanned photographic images, and computer generated images. (see col. 6, lines 17-50); and

As per claim 14, Lo discloses the method according to claim 11, wherein the distributed computer network comprises the Internet (see fig. 3, element 20 and col. 6, lines 19-28).

As per claim 15, Lo discloses the method according to claim 11 wherein the storing the electronic model image data files comprises:

storing the file header info data extracted from the file header info data block into a database for use in processing the search queries received from the remote client computer (see col. 8, lines 21-48); and

storing the electronic model image data files into a file storage database for use in processing file transfer requests received from the remote client computer (see col. 8, lines 21-48).

As per claims 16-45 the claim include features similar to those of claim 1-15, thus claims 16-45 are rejected same rational as claim 1-15.

### **Conclusion**


4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Salad E Abdullahi whose telephone number is 571-272-4009. The examiner can normally be reached on 8:30 - 5:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on 571-272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

6. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

  
Abdullahi Salad  
Examiner AU 2157  
12/3/2004